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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/828,569	04/21/2004	Bettina Siggelkow	2003DE419	5297
7590 01/10/2008 Clariant Corporation Industrial Property Department			EXAMINER	
			TOOMER, CEPHIA D	
4000 Monroe Road Charlotte, NC 28205			ART UNIT	PAPER NUMBER
Charlotte, 110 20205			1797	
			MAIL DATE	DELIVERY MODE
			01/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/828,569	SIGGELKOW ET AL.	
Office Action Summary	Examiner	Art Unit	
	Cephia D. Toomer	1797	
The MAILING DATE of this communication a		th the correspondence address	
Period for Reply	9		
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a re od will apply and will expire SIX (6) MON ute, cause the application to become ABA	CATION.  ply be timely filed  ITHS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 16	October 2007.		
· · · · · · · · · · · · · · · · · · ·	nis action is non-final.		
3) Since this application is in condition for allow	vance except for formal matte	ers, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 9 and 11-18 is/are pending in the a	pplication.		
4a) Of the above claim(s) is/are withdr	•		
5) Claim(s) is/are allowed.			
6) Claim(s) 9 and 11-18 is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	ner		
10) The drawing(s) filed on is/are: a) ac		by the Examiner.	
Applicant may not request that any objection to the	ne drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the corre			
11) The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:	gn priority under 35 U.S.C. §	119(a)-(d) or (f).	
1. Certified copies of the priority docume	nts have been received.		
2. Certified copies of the priority docume		oplication No.	
3. Copies of the certified copies of the pr	•		
application from the International Bure	au (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list	st of the certified copies not r	eceived.	
Attachment(s)			
1) Notice of References Cited (PTO-892)		ummary (PTO-413) /Mail Date	
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)	5) D Notice of In	formal Patent Application	
Paper No(s)/Mail Date	6)  Other:	<u>-</u> ·	

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## **DETAILED ACTION**

This Office action is in response to the amendment filed October 16, 2007 in which claim 9 was amended and claims 11-17 were added.

The rejection of claim 9 under 35 U.S.C. 112, second paragraph is withdrawn in view of the amendment to the claim.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claims 9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5,743,923).

Davies teaches a fuel oil composition comprising a blend of biofuel and petroleum-based fuel oil and an ethylene-unsaturated ester copolymer (see abstract).

Davies teaches that the invention is applicable to mixtures of the fuels in all proportions,

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but prefers 5-75% biofuel (see col. 2, lines 66-67; col. 3, lines 1-5). The unsaturated ester monomer of the ethylene copolymer has the formula –CH<sub>2</sub>CRR<sup>30</sup> wherein R is H or CH<sub>3</sub> and R<sup>30</sup> represents a COOR<sup>3</sup> group or a OOCR<sup>4</sup> group wherein R<sup>3</sup> and R<sup>4</sup> independently represent a hydrocarbyl group (see col. 3, lines 24-32).

Davis defines hydrocarbyl as a group having a carbon atom directly attached to the rest of the molecule and having a hydrocarbon or predominantly hydrocarbon character. The groups may contain non-hydrocarbon substituents such as hydroxyl (see col. 3, line 62 through col. 4, lines 1-11). The copolymer may also contain units selected from olefins (see col. 4, lines 38-40). The unsaturated ester represents from 5 to 40 mole percent of the copolymer (see col. 4, lines 58-61). The copolymer has an average molecular weight from 2,000 to 14,000 (see col. 4, lines 62-65). The fuel composition contains from 0.0005 to 1% of the copolymer (see col. 6, lines 13-16). Davies teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Davies differs from the claims in that he does not specifically teach the OH number of the olefinically unsaturated compound. However, no unobviousness is seen in this difference because Davies teaches olefinically unsaturated monomers that are within the scope of the present invention and it would be reasonable to expect that the monomers would possess an OH number within the claimed range, absent evidence to the contrary.

4. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5,743,923) in view of Krull (US 5,998,530).

Davies is silent with respect to the addition of an alkylphenol-formaldehyde resin to his composition. However, Krull teaches this difference.

Krull teaches that alkylphenol-aldehyde resins such as those set forth in present claim 8 improve the flowability of mineral oil distillates (see abstract; col. 5, lines 1-37; col. 8, lines 16-37).

It would have been obvious to one of ordinary skill in the art to combine the ethylene copolymer and alkylphenol-aldehyde resin because Krull teaches that the flowability of the oils may be improved by combining such additives (see abstract; col. 3, lines 22-32).

## Response to Arguments

- 5. Applicant's arguments have been fully considered but they are not persuasive.
- 6. Applicant argues that Davies should be withdrawn because it discloses a method for improving the cold flow properties of fuel oil mixtures which is not analogous to demulsifying a water-in-oil mixture of a middle distillate, a biofuel oil and water.
- 7. Although Davies does not specifically mention Applicant's benefit of demulsifying a fuel/water blend, such benefit would have naturally flowed from following the suggestion of Davies. Ex parte Obiaya, 227 USPQ 58 (BPAI 1985) (holding that the recognition of another advantage flowing naturally from following the suggestion of the prior art cannot be the basis for patentability when the difference would otherwise be obvious). Furthermore, Applicant is arguing limitations that are not in the claims. The claims are devoid of water.

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8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cephia D. Toomer Primary Examiner Art Unit 1797

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